

ABSTRACT OF THE DISCLOSURE

A single cell for a solid oxide fuel cell and a solid oxide fuel cell using the same practicable and excellent in generation performance and durability, wherein a fuel electrode including a cermet of a catalyst and a second solid electrolyte with oxide ion conductivity at 1000°C of 0.20 S/cm or more is bonded to one side of a solid electrolyte plate with the conductivity of 0.07 S/cm or more and bending strength of 700 MPa or more, and an air electrode including a compound of perovskite type transition metal oxide with a third solid electrolyte is bonded to the other side. A surface of the fuel electrode is coated with a layer, and an air electrode surface is coated with a layer, and an aqueous solution where a noble metal compound is dissolved in water is impregnated into the air electrode.